

## 19. TRANSPORTATION

**Table 19-1. FEDERAL RESOURCES IN SUPPORT OF TRANSPORTATION**  
(In millions of dollars)

Function 400	1996 Actual	Estimate					
		1997	1998	1999	2000	2001	2002
<b>Spending: <sup>1</sup></b>							
Discretionary Budget Authority .....	13,628	13,782	13,534	14,566	14,722	14,978	15,236
Mandatory Outlays:							
Existing law .....	2,501	2,450	2,381	2,329	2,151	2,031	1,954
Proposed legislation .....			35	22	6	-51	-651
<b>Credit Activity:</b>							
Direct loan disbursements .....	47	216	591	791	863	879	879
Guaranteed loans .....	826	1,065	477	477	477	477	477
<b>Tax Expenditures:</b>							
Existing law .....	1,320	1,365	1,405	1,455	1,505	1,560	1,620

<sup>1</sup> This table excludes spending subject to obligation limitations.

America's transportation network moves people through a combination of public and private systems, financed by Federal, State, and local governments and the private sector. Maintaining and improving these systems requires infrastructure investment, safe operations, and new technology.

Though the Federal Government plays a major role in each of these areas, it does not act alone in any of them. With just a few exceptions, Federal transportation programs are designed to promote transportation access for all citizens, ensure the safe design and movement of privately-owned and operated vehicles, help a struggling segment of the transportation industry, or advance transportation research. In total, Federal transportation spending comes to about \$39 billion a year.

### Infrastructure Investment

America has four million miles of roads, 580,000 bridges, 123,000 miles of railway, 5,500 public-use airports, 6,000 transit systems, and 25,000 miles of commercially-navigable waterways. This extensive, multi-modal network is essential to the Nation's commerce,

and a more efficient system would help the economy.

The Federal Government has helped develop large parts of the system, with much of the help financed by user fees and transportation taxes. Total Federal investment in transportation represents about half of total public investment—that is, \$27 billion of the \$54 billion of Federal, State, and local spending on transportation infrastructure in 1993.

**Highways and Bridges:** About 950,000 miles of roads and all bridges are eligible for Federal support, including the Interstate highway system, urban freeways, urban and rural principal and minor arterials, defense highways, and Federal lands roads. In 1998, the Federal Government plans to spend \$19.8 billion to maintain and expand these roads, with the Federal funds financed by motor fuels taxes, mainly the gasoline tax. The Federal gas tax is 18.4 cents a gallon, of which 12 cents finances formula grants to States for highway-related repair and improvement.

State and local governments provide 56 percent of total highway and bridge infrastructure spending, most of which they generate

through their own fuel and vehicle taxes. The average State gasoline tax was 19.3 cents per gallon in 1995. State and local governments also are accelerating their infrastructure projects by using debt financing, such as bonds and revolving loan funds. Under the new State Infrastructure Banks program, the Federal Government is providing funds to States to help underwrite debt issuance for highway and transit projects. In addition, the new Transportation Infrastructure Credit Program promises to provide similar financing innovations for nationally significant projects.

The Interstate highway system is virtually complete, with 45,481 of the 45,500-mile system open to the public. Its completion marks the end of America's largest-ever public works project, begun during the Eisenhower Administration as a "grand plan" to meet the transportation needs of a rapidly growing Nation.

**Transit:** As with highways, the Federal Government plays a partnership role with State and local governments on mass transit. Two cents a gallon of the Federal gas tax goes to fund transit grants to municipalities and States. Federal capital grants comprise about half of the total spent each year to maintain and expand the Nation's 6,000 bus, rail, trolley, van, and ferry systems. Together, States and localities invest over \$3 billion a year on transit infrastructure and equipment, including funds to "match" Federal grants.

In 1998, the Federal Government plans to spend \$4 billion on transit capital. The Federal role is especially important to finance capital-intensive urban rail systems and low-volume rural bus and van networks. About 80 million Americans depend on public transportation due to age, disability, or income. Furthermore, transit use by commuters eases roadway congestion and reduces polluting emissions.

**Passenger Rail:** The Federal Government will invest about \$424 million in 1998 to support the passenger rail system's infrastructure and equipment needs. The extension of the Northeast Corridor high-speed rail to Boston highlights the partnership between the Federal Government and private sector to improve passenger rail. The Federal Government funds

the electrification of the rail line, while the private sector helps to finance the high-speed trainsets that will begin operating in late 1999, introducing three-hour service between New York City and Boston.

**Airports:** The Airport Improvement Program (AIP) provides grants to States, localities, and airport authorities to maintain and enhance airport safety, preserve airport infrastructure, and expand capacity and efficiency throughout the system. The AIP typically funds a fourth to a third of all capital development at public use airports, while airport revenues (e.g., concession revenues, landing fees, passenger facility charges) finance the rest.

**Other Transportation:** With regard to commercial shipping infrastructure, Federal loan guarantees facilitate the construction of new vessels and the renovation of existing vessels. Port development is left largely to State and local authorities, which have invested over \$14 billion in infrastructure improvements over the past 50 years. Of America's 541 private freight railroads, the largest 11 moved over one trillion ton-miles of freight in 1994—about a third of the total ton-miles shipped. Freight railroads finance their own infrastructure, spending over \$7 billion a year to upgrade and maintain track and structures.

### **Safe Operations**

The Federal Government works with State and local governments and private groups to mitigate the safety risks inherent in the transportation system. It regulates motor vehicle design and operation, inspects commercial vehicles, educates the public about safe behavior, directs air and waterway traffic, and rescues boaters in danger.

A broad range of Federal activities are designed to cut the number of deaths and injuries from highway crashes, which number about 41,000 and five million a year, respectively. Due to Federal, State, local, and private efforts, safety belt usage reached an all-time high of 68 percent in December 1995. Federal programs reach out to State and local partners, including health care professionals, to identify the causes of crashes in each community and develop new strategies to reduce deaths, injuries, and the resulting medical costs. These programs will be increas-

ingly important as the number of young drivers grows. In addition to coordinating national traffic safety campaigns, the National Highway Traffic Safety Administration (NHTSA) regulates the design of automobiles and light trucks, investigates reported safety defects, and distributes traffic safety grants to States. The budget proposes \$333 million for NHTSA, a 10-percent increase over 1997.

The Federal Government's most visible safety function is operating the air traffic control and air navigational systems. The Federal Aviation Administration (FAA) handles about two flights a second, moving 1.5 million passengers to where they want to go each day. The FAA also uses its regulatory and certification power to ensure that every aspect of aviation is safe—from aircraft design and maintenance to the flight crew. In 1996, the FAA performed over 300,000 inspections to ensure compliance with safety regulations. To meet safety needs in 1998, the Administration plans to spend \$7.2 billion on FAA operations and capital, five percent more than in 1997.

The Federal Government also plays an operational role on major waterways. The Coast Guard places and maintains waterborne aids-to-navigation, operates radio navigation and distress systems, guides vessels through busy ports, and regulates vessel design and operation. The Coast Guard helps ensure safety on minor waterways and inland lakes by providing boating safety grants to States, and by supporting a 35,000-member voluntary auxiliary that performs complimentary boat safety inspections and educates boaters about safety. In 1998, the Coast Guard will invest \$3.1 billion in its operating and capital programs, which are mainly dedicated to safety.

The National Motor Carriers Program, for which the budget proposes \$100 million in 1998, provides grants to States to enforce Federal and compatible State standards for commercial motor vehicle safety inspections, traffic enforcement, and compliance reviews. Uniform standards help coordinate law enforcement activities, and simplify the safety requirements of interstate trucking. Federal grants are designed to help States boost safety.

## **Research and Technology**

The Federal Government has long led efforts to advance transportation technology. Federal transportation research has focused on building stronger roads and bridges, designing safer cars, and reducing human error in operating vehicles of all types. Today, the increasing congestion of roadways and airways is colliding with Federal budget constraints and with environmental and land-use concerns. Consequently, transportation planners believe that better management of the existing infrastructure is a cost-effective alternative to building more highways and airports. In 1998, the Federal Government will spend over \$1 billion on transportation research and technology.

The Federal Highway Administration's Intelligent Transportation Systems (ITS) program is developing and deploying technologies that will help States and localities improve traffic flow and safety on their streets and highways. These technologies include intelligent cruise control, passive tolling and inspection, and automated highways. The private sector, which works closely with the ITS program, will initially deploy many of the technologies developed with ITS funding.

The FAA's research, engineering, and development programs help improve safety, security, capacity, and efficiency in the National Airspace System. For instance, the advanced traffic management system and the early introduction of satellite navigation capabilities will improve the aviation industry's competitiveness and the FAA's efficiency. In general, FAA research focuses on the causes of human error; aircraft safety and fire protection methods; aviation weather research; quieter engines and reduced aircraft emissions; and security and explosives detection systems.

The National Aeronautics and Space Administration's Aeronautical Research and Technology program funds partnerships with industry that may revolutionize the next generation of airplanes, making them faster, more efficient, and more compatible with the environment. These activities include programs to advance the capabilities of sub-sonic aircraft, to help develop large, high-speed civilian airplanes, and to enhance the performance

of aeronautics-related computing and communications facilities.

### **Regulation of Transportation**

Federal rules greatly influence transportation. Over the past two decades, deregulation of the domestic railroad, airline, and interstate trucking industries has contributed to the Nation's economic growth. More recently, deregulation has continued. In 1993, for example, the Federal Government deregulated intrastate trucking, saving shippers and consumers an estimated \$3 billion to \$8 billion a year.

The Federal Government also issues regulations to spur safer, cleaner transportation. The regulations improve safety—of cars, trucks, trains, and airplanes—leading to substantial reductions in transportation-related deaths and injuries. In addition, they help reduce the number of oil spills and provide a faster response when spills occur.

The Government has taken other regulatory steps to meet transportation-related environmental and safety goals in a cost-effective manner. For example, between now and 2015,

the costs of oil shipments to the United States will fall by hundreds of millions of dollars due to “lightering zone” regulations that permit older, single-hull vessels in the Gulf of Mexico to off-load oil. The Federal Government is also making its regulations parallel with those of other countries. An agreement on aviation safety rules—now under negotiation with the European Community—promises to save airlines at least \$100 million, and possibly \$1 billion, over 10 years.

### **Tax Expenditures**

Employer-provided parking and transit passes are, for the most part, not subject to income taxes, costing the Government an estimated \$6.9 billion from 1998–2002; the estimate does not include the value of employer-owned parking. To finance infrastructure, State and local governments issue tax-exempt bonds whose costs to the Federal Government, in lost revenues, are reflected in the General Government and Community and Regional Development functions.